Breakout Group Yellow

Breakout Presentation from the National Micro-CHP Technology Pathways Workshop

Premises, Caveats, and Assumptions

- Both thermal load and electric load following systems may be needed
- Primary focus will be single family residences
- Prime mover and fuel neutral
- Market is ready to adopt technology

Technology Cost and Performance Targets

- Efficiency target needs to weigh relative value of outputs: elec, cooling, heating
- Output-based emissions targets based on RAP proposal with adjustments for residential application
- Systems design should include open architecture for interoperability
- Ultimate cost target is a three year payback with no "shock" cost

Top Priority RD&D and Tech Transfer Needs

- Develop "home load management" control systems
 - Prioritize loads
 - Defer discretionary loads
 - Buy/sell decisions
- Develop measurable performance benchmarks: "applesto-apples"
- Develop energy storage devices (elec&thermal)
- Conduct market assessment to define customer expectations/requirements
- Develop and demonstrate packaged systems for targeted markets and regions

Actions and Next Steps

- Market study and solicitation
- Establish viable business models
- Develop and demonstrate systems
- Develop standards and test protocols
- Hold additional stakeholder workshops

Key Themes and Messages

- Viable business models
- Close collaboration with utilities, builders
- Systems must address market needs
- DOE needs to clarify desired national benefits